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The Marriage Penalty and Other Family Tax Issues

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ABSTRACT

This report estimates the effects of current tax policies on families of different types and sizes and analyzes proposals to address the marriage penalty and the child tax credit. It also contains a history of the development of tax provisions affecting the family.

The Marriage Penalty and Other Family Tax Issues

Summary

Proposals to reduce marriage tax penalties have received attention: an increase in the joint return standard deduction is included in H.R. 4579, passed by the House on September 26. The Administration has proposed an increase in the child care credit; a number of bills have been introduced as well. Current law and proposed changes are addressed with respect to their effects on equity, efficiency, and administrative feasibility.

Using an ability-to-pay standard in determining at what incomes families of different sizes are equal, the current tax rules favor large families across most of the income scale, because of the more generous treatment of families with children under the earned income tax credit (EITC) and the recently enacted child credits. Married couples with one earner also benefit because the imputed value of a spouse's services in the home is not taxed; working couples and heads of households with children also benefit from child care credits. Essentially, these features establish single individuals and childless working couples as paying the highest tax rates, based on the ability-to-pay standard, for all but the very highest income taxpayers.

Two distortions of particular concern to family taxation are the effects on marriage and the burden the tax system imposes on the earnings of married women, who are estimated to be the most sensitive in their labor participation decisions.

The size and extent of marriage penalties and bonuses depend on assumptions made about splitting unearned income and deductions, and, particularly, about the allocation of children. If assignment is typical of what is more likely to occur when couples have children without marrying or if they divorce, with children assigned to the mother who has the lower earnings, 37% of couples have penalties of \$24 billion and 60% have bonuses of \$73 billion, for a net bonus of \$49 billion. If children are assigned in a way to minimize taxes, as assumed by the CBO in its base case for studying tax revisions, 43% of joint returns had penalties of \$32 billion and 52% had bonuses of \$43 billion, for a net bonus of \$10 billion.

Approaches to addressing the marriage penalty include optional separate filing, general reductions in tax rates for joint returns, and second earner deductions. The first approach targets benefits to returns with penalties and to earnings of married women, although it might be complicated and will differentiate taxes among married couples with the same income. A second earner deduction has similar characteristics, although it is less targeted to penalties; it is also flexible and relatively simple. Reducing joint return tax rates will be simple and keep rates the same for all married couples, but does not perform very well on equity and efficiency grounds. Most of these approaches favor higher income taxpayers; however, there are some options, including those focusing on the EITC, that would favor lower income taxpayers.

The desirability of larger child care credits, and of refundable credits, depends on one's philosophy about family needs and equity. There is little justification on equity grounds for proposed credits for at-home parents. In general, the current tax system appears to make highly generous adjustments for children.

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The Marriage Penalty and Other Family Tax Issues

Introduction

The marriage tax penalty (the increase in taxes that can arise when two singles marry) is the subject of several tax cut proposals. Marriage can also result in a tax bonus when the couples' income shares are uneven. Proposals include permitting married couples to file as singles, decreasing tax burdens for all married couples, and allowing a special deduction for the secondary earner. The first of these proposals can be found in H.R. 2456 (Weller and McIntosh) and other bills. Several bills would simply reduce simply tax burdens on married couples, for example H.R. 3104 (Riley) and H.R. 3734 (Weller, McIntosh, Riley and Herger), which would reduce marriage penalties, but which would also expand bonuses. This approach has been included in the current tax proposal passed by the House on September 26 (H.R. 4579); this bill would make the standard deduction for joint returns twice those for single returns. A third set of proposals is for a second earner deduction, as in H.R. 2593 (Herger and Kennelly).

The marriage penalty cannot be easily addressed because we cannot simultaneously achieve three apparently desired income tax objectives: a progressive tax, a marriage neutral tax, and equal treatment of couples with the same total incomes, but with different income shares. Currently, our system is progressive and taxes couples with the same income at the same rates, but contains marriage penalties and bonuses. However, the issue of equity goes beyond the issue of different treatment of couples with the same income, and concerns all families (single individuals will be referred to in this report as families). According to early tax data for 1996,¹ out of 111 million returns filed, only 44 million (about 40%) are joint returns of married couples (a small number of which are surviving spouses who are allowed to file joint returns for two years). Single returns account for 44%, and head of household returns (families with children or other dependents headed by a single person) account for 14%. (The remaining 2% are married persons filing separate returns.) In fact, the marriage penalty came into being in 1969 because of the enactment of a tax cut for singles, who complained that their taxes were too high. Any reduction of a marriage penalty through lower rates for all joint returns could also be characterized as increasing the penalty for being single, since data indicate that more than half of married couples receive bonuses rather than penalties.

To not consider equity between singles and married couples in addressing family tax issues is to ignore a large fraction of taxpayers. Therefore, this report

¹Internal Revenue Service, *Statistics of Income Bulletin*, Winter 1997-1998, Washington, D.C.: U.S. Government Printing Office, 1998, p.18..

considers equity across the range of taxpayers, not simply among different types of married couples.

The President proposed a different type of family-related tax provision in his budget message: an increase in the existing tax credit for child care expenses. He also proposed tax incentives for employer-provided child care. A number of bills have been introduced to expand child care tax benefits. In addition, some bills would allow child care credits to be used for imputed expenses when there is an at-home parent caring for a child. This latter type of proposal would transform the child care expense credit to a general child credit like that enacted in 1997, except that it would focus on younger children. (See CRS Issue Brief 98001, Child Care Legislation in the 105^{th,} Congress for a summary of legislative proposals.)

Interest in these issues of tax treatment of the family has been ongoing. The marriage penalty has been an issue almost since it was created in 1969 and for several years there was a second-earner deduction. The Tax Reform Act of 1986, which broadened the base and lowered tax rates, included a repeal of this deduction, in part because the marriage penalty was deemed to be less important with the less steeply graduated rate structure.

Legislative changes since that time, however, increased the importance of marriage for tax burdens. The effect of marriage on tax liability was exacerbated by the higher tax rates introduced in 1993 at the top of the income distribution and by the expansion of the earned income tax credit (EITC) at the bottom end. Marriage penalties occur because income is aggregated and forced into higher tax brackets upon marriage. In the case of the EITC, penalties can occur because larger aggregated incomes cause loss of the credit through income phase-outs. Bonuses, however, occur when one of the spouses has a small income relative to the other or, at the extreme, no income. Marriage to a non-working spouse results in larger standard deductions and additional personal exemptions; it can also increase the amount taxed at lower rates because the rate brackets are wider. It can make a single individual eligible for a larger EITC if he or she marries a person with children but with little or no earnings.

The House Republican Contract with America in 1994 proposed a reduction in the marriage penalty, although a specific mechanism was not set out.

Benefits for children have also been the focus of attention for some time. In 1991, several proposals were made to allow a child credit or increased personal exemption, in order to specifically target tax relief to larger families, in part because the tax burden was argued to have become increasingly burdensome on large families as personal exemptions failed to grow with inflation and income.² This shift was

²See, for example, *Reclaiming the Tax Code for American Families*, Hearing before the Select Committee on Children, Youth, and Families, House of Representatives, Washington, D.C., April 14, 1991; C. Eugene Steuerle and Jason Juffras, "A \$1000 Tax Credit for Every Child; A Base of Reform for the Nation's Tax, Welfare, and Health Systems," The Urban Institute, April 1991; *Beyond Rhetoric: A New American Agenda for Children and Families*, Final Report of the National Commission on Children, 1991.

even greater prior to the 1986 Tax Reform Act, which increased personal exemptions substantially.³

The proposals in 1991 for a refundable credit had nuances beyond the progressivity of the tax system itself, since it would have used the tax system to provide direct cash benefits for very-low-income families. The design of these proposals was also motivated by the concerns about disincentives in the current tax and welfare system to marry and work. A per child credit was also proposed in the House Republican Contract with America in 1994. In 1997, the Taxpayer's Relief Act adopted an additional per child credit of \$500, for children under 17. This credit was partly refundable against payroll taxes for families with three or more children. While a generally refundable child credit was not adopted, the EITC, which is refundable, was expanded substantially in 1993; its rates are much greater for families with children, with an even higher rate allowed for families with two or more children. These changes also altered the landscape for considering family taxation in the broader sense of family size. New work requirements in the welfare system have also made the issue of child care more of a concern, although child care assistance for low income individuals may be addressed through spending programs rather than tax benefits.

The tax system also contains a variety of phase-outs for tax benefits, including personal exemptions and child credits. Phase-outs were adopted to increase the progressivity of the tax system and direct benefits to lower income individuals; however, once personal exemptions and credits are phased out, there is no differential between the tax paid by large and small families. An alternative to phase-outs is more graduated rates, which would maintain an adjustment in tax liability for family size.

This analysis provides a framework for evaluating the efficiency, equity and administrative issues posed by the current and proposed tax provisions affecting the treatment of families with different characteristics.

The next section of the paper summarizes the development of the current tax system and the features which affect tax differentials across family type. The next section discusses distributional effects and equity, concentrating primarily on horizontal equity issues. The following section uses one of these horizontal equity principles, ability-to-pay, as a framework for examining the present tax differentials across families, including the marriage penalty and bonus. The next two sections briefly discuss efficiency issues and simplicity. The final section examines various tax proposals, including alternative ways of addressing the marriage penalty and of providing further relief for children through the child care credit.

Development of Current Tax Treatment of the Family

³An earlier paper by Steuerle documented the increased tax burden on large families prior to the 1986 Act. See Eugene Steuerle, *The Tax Treatment of Households of Different Size, Taxing the Family*, Ed. Rudolph G. Penner, Washington: American Enterprise Institute for Public Policy Research, 1983.

Current federal income tax law differentiates among families by type and structure in several ways. This differentiation has changed considerably over the years, and includes personal exemptions, standard deductions, rate schedules, and various other features such as child care credits, age exemptions, and earned-income credits.

Personal Exemptions; Child Credits

Personal exemptions allow a certain amount per person to be exempt from tax. Combined with standard deductions, which vary by family type, they exclude a minimum level of income from tax. In 1986, these combined amounts were roughly set at the poverty level. Personal exemptions can also play a part in marriage bonuses when only one spouse works: a single individual cannot claim an unmarried companion as a dependent, while a husband can claim a wife (and vice versa).

The tax laws have always allowed some relief for family size through exemptions, although the original 1913 Act allowed deductions only for the individual taxpayer (\$3,000) and spouse (\$1.000). These amounts were very large relative to incomes, but the initial income tax was not intended to reach a broad group of individuals. Even when dependent exemptions were allowed in 1917, they were only \$200, small relative to the basic exemptions. The practice of allowing an equal exemption for each family member began in the early 1940s.

Personal exemptions were reduced in the initial years of the tax, then increased, then reduced again; they were last reduced in the early 1940s. The real value of the exemptions was also affected by inflation. For example, the personal exemption remained constant at \$600 from 1948 through 1969, while its real value was heavily eroded through inflation. It was gradually increased over the next ten years to \$1,000, where it again remained constant until 1985. From 1948 through 1984 the personal exemption lost 63% of its purchasing power. Even the increase to \$2,000 in 1986 was insufficient to restore its 1948 value; its real value still fell by 38%. The exemption has been indexed for inflation since 1986

In large part due to diminution of the real value of personal exemptions, the tax burden had shifted over time to fall more heavily on larger families.

This effect was changed dramatically by the adoption of the \$500 child credits in the Taxpayer Relief Act of 1997. In the cases where these credits apply (for children under 17), they cause the personal exemption plus the deduction equivalent of the credit to be 57% larger than its 1948 value for families in the 15% rate bracket and 16% larger for families in the 28% bracket. The credit is not, however, indexed for inflation.

Standard Deduction or Flat Exclusion

Standard deductions, which vary across the types of returns (single, joint, and head of household), also affect tax burdens across families. The standard deduction for singles and heads of household are 60% and 80%, respectively, of the size of the

deduction for joint returns. The standard deduction can contribute to a marriage penalty. Four example, two singles who both work and marry will have a smaller combined deduction. It can also contribute to a marriage bonus, if there is only one earner in the couple, since the joint deduction is larger than the single deduction.

Virtually from its inception, the tax law allowed deductions for taxes, interest, charitable contributions, and certain other personal expenses. In 1944, a standard deduction of 10% of adjusted gross income with a ceiling of \$500 was allowed as a substitute for these itemized deductions.⁴ A major reason for this exemption was to reduce the number of itemizers and make tax filing less complex. In 1964, a minimum standard deduction of \$200 plus \$100 for each exemption with a \$1,000 ceiling was added. Beginning in 1969, these standard deductions were increased substantially. The percentage standard deduction was gradually increased to 16% and the ceiling increased to \$2,000. A low-income allowance of \$1,100, to be reduced by \$50 in each of the next two years, was substituted for the minimum standard deduction. (These reductions were included because of the rise in the personal exemption that was increasing total exempt amounts). The low income allowance was increased to \$1,300 in 1972.

In 1975, the low-income allowance was once again differentiated, but based on family type (joint, head of household, single) rather than size. Joint returns received a \$2,100 allowance by 1976. The ceiling on the percentage standard deduction was also differentiated by family type, and was raised to \$2,800 for joint returns by 1976. In 1977, the low-income allowance and the percentage standard deduction were consolidated into a single flat allowance called the zero-bracket amount, which was set at \$3,200 in 1977 and at \$3,400 in 1978. This zero-bracket amount was indexed in 1981, so that it would rise with inflation. The Tax Reform Act of 1986 raised the flat deduction amount, but continued to differentiate it with respect to family status (but not family size).

In comparing the relative benefits over time, it is important to consider the changes in all flat allowances as well, not just the personal exemption. For example, prior to the 1997 changes (and thus ignoring the child credit), while the real value of the personal exemption has declined about 38% since 1948, the exempt amount for a family of four (joint return) was very close to the exempt amount had 1948 values been indexed for inflation (using the GNP deflator).⁵ Indeed, current levels are about 3% larger than those which would have occurred had the exempt level in 1948 been indexed. Smaller families have more generous exempt levels today, while larger ones have less generous levels. For example (again, ignoring the child credit), exempt allowances are larger in real terms today for singles (60% larger), for heads of households with two or three family members (34% larger and 10% larger)) and for joint returns with two, three, or four family members (44%, 17% and 3% larger respectively). Real levels are smaller than in 1948 for heads of household with four

⁴In general, floors and ceilings for standard deductions for joint returns were halved for married couples filing separate returns.

⁵In 1997, the personal exemption was \$2,650 and the standard deduction \$6,900, for a total of \$17,500. The exempt allowance in 1948 was \$2,667 (600 times 4 divided by .9). If the 1948 levels had kept pace with the GNP deflator, the total amount would be \$16,976.

or more family members (2% for a four-person family, 9% for a five-person family, and 14% for a six-person family). They are also smaller for joint-return families with five and six family members (5% and 10%, respectively).

Heads of household and joint returns with children eligible for the child credit, however, have greater exempt levels. For joint returns, assuming that additional members are eligible children causes all of them to have increased exempt amount equivalents between 40 and 44% higher than in 1948; for heads of households, all families are better off (an increase of 73% for a family of two, 63% for a family of three, 56% for a family of four, and 54% for a family of five). Note, however, that changes in benefits compared to past levels do not necessarily have implications for the appropriate treatment of different families. If past family differentiation was not due to a theory about equitable treatment of differing families, there is no economic reason that current tax treatment should conform to any past standards.

Rate Structure

Two important aspects of the rate structure are the unit of taxation and the progressivity of the rate structure (that is, how tax rates rise as increments of income increase). Today, rates are imposed at 15, 28, 31, 36, and 39.6% and taxes are imposed on family units. Married couples cannot use the single rate schedules (although they can file separately through with a rate structure that offers no advantage over joint filing). A significant majority of taxpayers are subject to rates of 15%, and most have incomes that are taxed no higher than 31%. The width of the brackets is greatest for joint returns and smallest for singles. The points at which the 28 and 31% rates are reached for single returns are 60% as large as for joint returns; the 36% bracket for singles is reached at a point 82% as large. For heads of household, the 28, 31, and 36% brackets are reached at points 80, 85, and 91% the size of those for joint returns. The 39.6% rate is reached at the same taxable income level for all returns. There are also phase-outs of itemized deductions, personal exemptions, and child credits at very high income levels.⁶ However, the higher rates and the phase-outs apply to only a small fraction of taxpayers. Less than five % of taxpayers had adjusted gross income over \$100,000 in 1995.⁷

In the original 1913 tax law, a single rate structure was applied to all taxpayers as individuals. In 1948, joint returns were allowed that effectively permitted income

⁶ The itemized deduction phase-out range, which is indexed for inflation, is projected to begin at about \$125,000 for 1998; the personal exemption phase-out, which is also indexed, varies by type of return, but should begin at about \$125,000 for singles. The 36% rate begins at \$155,000 of *taxable* income, and the 39.6% rate begins at \$278,000 of *taxable* income. Child credits will begin to phase out at about \$75,000 for head of household returns and \$110,000 for joint returns. These higher tax rates tended to exacerbate the problems of the marriage penalty, and also meant that personal exemptions are eventually eliminated for very high income taxpayers, so that families of different sizes would not have different tax burdens at these incomes.

⁷Internal Revenue Service, *Statistics of Income Bulletin*. Fall 1997. Washington, D.C.: U.S. Government Printing Office, 1997, p. 22.

splitting. This change had little to do with any theory regarding the tax treatment of the family. Rather, it occurred because married couples in community property states were successfully claiming the right to divide their income evenly for tax purposes. Under a graduated rate structure, this income-splitting reduces the total tax burden by reducing the amount of income subject to higher rates. Income-splitting was adopted to equalize treatment across the states and to forestall a major tax-induced disruption in state property laws. This move created the familiar joint and single returns. Both the community property treatment and the legislated income-splitting resulted in a tax subsidy for marriage. Individuals who married would experience lower tax liabilities due to the rate structure as long as their incomes were unequal. Shortly after, in 1951, a head-of-household schedule for unmarried taxpayers with dependents was introduced which allowed half the benefits from income splitting (i.e wider tax brackets). This treatment could, in theory, create a marriage penalty, for families with children, although this point received virtually no attention.

Criticism from singles, arguing that their taxes were too high, led in 1969 to a singles rate schedule with wider brackets. This difference in rate schedules, however, also created a marriage penalty for certain types of families, including those without children. If both spouses worked, tax bills could increase with marriage. Many people were uncomfortable with a tax provision which encouraged couples to live together without benefit of matrimony. Coupled with increasing female labor participation and a changing social structure, the marriage penalty created considerable concern. For this reason, a capped deduction for the secondary earner in a family was adopted in 1981. The provision allowed ten% of income to be deducted, subject to a cap of \$3000. This deduction was an imperfect device which partly alleviated the problem of the marriage penalty and, for individuals below the cap, reduced the marginal tax rate on the secondary worker. It was repealed in 1986, when the flatter rate structure caused the marriage penalty to be less severe. The marriage penalty was increased for very high income individuals in 1993 with the addition of higher tax rates. These changes affected, however, only a very small fraction of the population.

The degree of progression in the rate structure interacts to affect the tax burden that applies to taxpayers in different circumstances. The rate structure has varied significantly over time, but a major revision in the 1986 act reduced the brackets to two (15 and 28%) as well as lowering the top bracket. Certain benefits were phased out. In 1990, the "bubble" due to these phase-outs was eliminated in exchange for adding a new tax rate of 31%.⁸ (Capital gains were held to a 28% rate). However, personal exemptions were still phased out. Itemized deductions were also phased out, on a temporary basis, at three% of AGI. Since itemized deductions tend to rise with income faster than the reductions due to the phase-out, this phase-out is the equivalent of increasing taxable income by 3%, and an additional percentage point or so in tax. (Each dollar of adjusted gross income taxed leads to a reduction in

⁸Although there were two statutory rate brackets after 1986, 15 percent and 28 percent, there was also a surcharge that was designed to phase out the benefits of the 15 percent rate and the personal exemptions for high income taxpayers. This surcharge effectively increased the tax rate by 5 percentage points, to 33 percent, and created a bubble: rates were 15 percent, then 28 percent, then 33 percent, and then fell back to 28 percent.

deductions of \$0.03, and if the marginal tax rate is around a third, then the additional tax per dollar of income is around \$0.01). In 1993, two marginal tax rates were added at the upper income levels, 36% and 39.6%; this legislation made the itemized deduction and personal exemption phase-outs permanent.

Earned Income Tax Credit (EITC)

The earned income tax credit (EITC) is a refundable credit (or negative tax) that provides a wage subsidy for low income working individuals. The credit is a percentage of earned income which reaches a maximum fixed amount and then is eventually phased out. The credit rates are currently 7.65% for families without children, 34% for families with one child, and 40% for families with two children. The phase-out levels are higher for families with children than for those without children. In 1997, the credit reached its maximum value of \$332 for families with no children at an income of \$4,300; the credit is phased out at incomes between \$5,440 and \$9,770. For families with one child, the maximum credit of \$2,210 is reached at \$6,500; the credit is phased out between \$11,950 and \$25,800. For families with two or more children, the maximum credit of \$3,656 is reached at \$9,100 and is phased out between \$11,960 and \$29,290.

Unlike some other provisions, there is no differentiation by family type; rather, the differences depend on the presence of one, two or no children. The EITC plays a role in creating a marriage penalty for lower income families. If individuals with low earnings marry, the couple's higher combined income may phase out more of the earned income tax credit. At the same time, marriage can reduce taxes if a single individual marries someone with children but with little or no income, because he or she becomes eligible for the larger credit for families with children.

The earned income tax credit (EITC) was first enacted in 1975. This provision provided a refundable tax credit for ten% of earned income, phased out at a rate of ten% of income over \$4000. Because the credit was refundable, individuals who paid no income tax were nevertheless eligible for a benefit. There were a variety of rationales for the EITC: to provide a work incentive, to offset the social security tax burden, and to provide relief for recent price increases in food and fuel. The credit was, however, only allowed to individuals who maintained a household for dependent children; thus, like the major welfare program, AFDC (Aid to Families with Dependent Children), the EITC as originally enacted was not extended to singles and childless couples.

The EITC has been revised in various ways, and in 1990 was differentiated with respect to number of children. In 1993, the credits were increased substantially and a small credit was added for families without children.

Child or Dependent Care Credit

Another provision allows for credits for paid child care expenses for children under 13 and disabled dependents. A deduction for these costs was first allowed in 1954 and converted to a credit in 1976. The credit is 30% of eligible expenses but is phased down to twenty% as income rises from \$10,000 to \$28,000. Eligible

expenses are limited to \$2,400 for one child, and \$4,800 for two or more children. The credit is available only to single parents or married couples where both parents work and is limited to the smaller earned income. It is not indexed.

Other Provisions

In addition to these basic provisions—rate structures, personal exemptions, standard allowances, and credits—several other provisions related to family structure are summarized here. First, there are specific provisions that relate to family structure or characteristics. There are additional standard deductions for elderly and blind taxpayers (provisions that give little benefit to high income individuals who tend to itemize deductions). In addition, there is a 15% tax credit for the elderly and disabled that is phased out; since the base for the credit is offset by social security, it tends to benefit elderly and disabled individuals who do not receive social security. Another explicit family tax provision, adopted in 1986, is the "kiddie tax" which taxes unearned income of children under 14 at the parents' tax rate.

One might add a variety of exclusions (some social security benefits, welfare payments, in-kind benefits, employer provided child care) and deductions or credits (medical expenses, educational expenses) which benefit families of certain income levels characteristics. Moreover, since the tax law does apply to certain imputed income, families who prefer owner-occupied homes or in-home provision of goods and services, or the consumption of leisure over other goods, have greater tax benefits. These benefits are, in some cases, associated with family characteristics. For example, families with higher incomes and at certain ages are more likely to live in owner-occupied homes. One-earner married couples benefit from the services provided in the home by the non-working spouse which are not subject to tax.⁹

Finally, the payroll tax can alter the relative net tax burden between different types of families with consequences that could matter for concerns of equity and efficiency (such as work choice). The social security system may confer a marriage bonus, that can increase the implicit tax on work effort for second earners. Spouses receive a benefit, without necessarily paying any payroll taxes of their own; a second-earner spouse pays additional social security taxes but his or her benefit is only the net of a benefit based on the individual earnings record and the benefit for spouses—and this amount may not be positive. That is, the spouse's benefit based on the partner's earning record may be better than the benefit a spouse receives on his or her own earnings record, and there is, therefore, no return to payroll taxes paid. Thus, the net tax on a second earner spouse is effectively larger than it would be in the absence of a benefit for spouses, since little or no additional benefits occur as a result of those payments. There are also implicit taxes that affect behavior in the

⁹This concept may unfamiliar, particularly to readers who think of spouses working at home as making a monetary sacrifice, perhaps to stay with their children. While their income is smaller, they save the taxes that would have been paid on outside earnings. However, these spouses do not give up all of their income, since there are cost savings, as in lower child care payments or not having to pay for other services (e.g. dry cleaning, household help). It is this value that provides a benefit to one-earner families and is the imputed income not subject to tax.

transfer system, where increases in income through work or marriage may cause a reduction in benefits, thereby discouraging these behaviors.

Equity and Distributional Issues

Tax proposals can be evaluated on many grounds, but one issue is that of fairness. This issue of fairness can involve two elements: vertical equity, or the equity of changes in tax burdens as income rises for an otherwise identical family, and horizontal equity, or how taxes should be fairly differentiated between families of different sizes and structures. This analysis focuses primarily on the issue of horizontal equity, since this is an issue which can be addressed in a more analytical framework. We first, however, briefly discuss the issue of vertical equity.

Vertical Equity

Different tax revisions can have very different distributional effects for high and low income taxpayers. Because the desired degree of redistribution cannot be easily established, issues of vertical equity involve value judgments to a considerable degree.¹⁰ By and large, the overall distribution of the tax system has not changed very much in the last twenty years, although there have been fluctuations at the bottom and the top of the income distribution and a generally lower burden at the lower end of the distribution due to the earned income tax credits which have more than offset growth in payroll taxes.¹¹

How different tax revisions affect the progressivity of the income tax depends on several factors.

First, a significant fraction of taxpayers do not have income tax liability. Positive income taxes do not apply in most cases until individuals are above the poverty line. In the Tax Reform Act of 1986, the combination of standard deductions and personal exemptions were set to roughly approximate the poverty line —the income levels above which families of different sizes are not considered poor. The allowances for single individuals are clearly below the poverty line. The addition of the child credit means that taxpayers with qualifying children well above the poverty line would not be subject to tax. These taxpayers would not be affected by a tax cut.

¹⁰Progressivity in the tax system is typically based on an equal sacrifice notion and the notion that a dollar to a poor person is much more valuable than a dollar to the wealthy person. These theories do not easily pin down the desired degree of progressivity, however.

¹¹See Gregg A. Esenwein, *The Size and Distribution of the Federal Tax Burden: 1950-1995*, CRS Report 96-386 E, April 30, 1996. Tax rates at the top first fell with the tax cuts in the 1980s and then rose, largely because of the higher tax rates in 1993. These numbers do not take into account the effects of the 1997 tax cuts, which had benefits for higher income individuals because of the capital gains tax cuts, as well as a variety of other provisions that benefitted middle and upper-middle income individuals.

An exception is when tax cuts are refundable. An expansion of the EITC, which is a refundable credit (or negative tax), would affect low income individuals. Other tax credits can also be made explicitly refundable, as has been proposed for the child care credit in some bills.

Certain types of revisions tend to benefit higher income individuals, while others tend to provide little benefit to that group. For example, widening the joint rate brackets as is proposed in some plans would tend to benefit higher income individuals who are affected by the higher rates. Higher income individuals are also more likely to itemize deductions, and changes which increase the standard deduction will tend to focus more benefits to moderate income taxpayers than high income ones. Similarly, expansions of benefits that are phased out, such as the personal exemptions and child credits, would not benefit high income individuals

Horizontal Equity

Horizontal equity has to do with equal treatment of equals. For the income tax, this standard might mean that families of the same size with the same income should pay the same tax. But, it could also be taken to mean that two individuals with the same income should pay the same tax. In a progressive tax system, these two standards can be incompatible, and, indeed this incompatibility causes marriage penalties and bonuses in a system where the family is the tax unit. Thus, the basic challenge of assessing standards of horizontal equity is to determine how to treat different taxpayers equitably. First, we review the economic principles which could be used in that assessment. Second, we consider in further detail the ability-to-pay concept, which seems most consistent with the equal-sacrifice principles of horizontal equity.

As the recent history of the tax law suggests and the following discussion reveals, tax policy has not generally been guided by a consistent theory of fairness or equity across different types of families. Indeed, it is clear that many of the structural changes in the treatment of the family were haphazard. Income splitting, perhaps one of the most important aspects of family tax differentials, was adopted in reaction to a legal situation. Other changes were contemporary reactions to a set of complaints or concerns about behavioral response (such as the singles rate schedule or attempts to fix the marriage penalty).

Theories of Equitable Taxation. For taxation purposes, there are two fundamental attributes of families: the type of head (a married couple, or a single individual) and the size. Families can be composed of single persons, single parents with children, childless couples, and married couples with children. And, in turn, there are two important features of the tax system that relate to these differences. First, should the unit of taxation be the individual, or the family? The U.S. tax system imposes taxes on families and differentiates in its rate structure between singles, head of households (single parents with children), and married couples. However, an alternative would be to apply a single rate schedule to each individual on his or her own earnings. While some preference for this view of individual taxation may have to do with philosophical matters, one argument for treating the individual rather than the family as a taxpaying unit has to do with marriage neutrality and efficiency, which are discussed subsequently. That is, if individuals

could be taxed solely on their own earnings, there would be no tax consequences of being married, and the married state would not affect incentives to work via tax differentials.

The second issue is how one should adjust for family size, or, in the case of individual taxation, for the number of dependents. Despite the thrust of recent legislation which added substantial tax credits for children, some of the debate over differentiating by taxpayer characteristics has been over whether personal exemptions for dependents should be allowed at all. Under some theories of how the family should be taxed, no differentiation should be allowed for dependents; indeed, arguments are made that individuals should be taxed on their income without regard to their family arrangements. For that matter, individual taxation does not preclude allowances for number of dependents; rather, its focus is on treating working adults, even though married, as separate entities.¹² (In practice, such a tax system must always deal with the possibility of income splitting of capital income by transfers of assets within the family, as well as the allocation of deductions.)

Clearly the family involves a social and economic unit which differs from unrelated groupings. Although taxation of the family has received limited attention in the economics literature, various principles have been advanced about how to treat family characteristics. Three such approaches are outlined here: treating living arrangements and children as personal choices that should not be addressed by the tax law, equating post-tax standards of living for families with the same pretax standard of living, and family assistance.

This analysis does not consider another alternative principle of taxation, the benefit principle, which would set taxes to reflect the amount of government services received. One could argue that large families, particularly families with children, are greater beneficiaries of public spending, such as education. While some taxes are explicitly formulated as benefit taxes (e.g., the gasoline tax which is used to build roads), the individual income tax has generally been based on other principles, such as the ones described here.

Family Arrangements as Personal Choices. People are relatively free to choose whether to marry and have children, and an argument can be made that such choices should not lead to tax relief. From this perspective, if they choose to have children, they are not worse off, since the enjoyment they receive from their children outweighs any cost. Thus, one could think of children as part of the consumption of the parents.¹³ At a minimum, this approach suggests that no allowance be made for the additional cost of supporting children, treating the choice to have children as a consumption item, no different from the decision to consume food or clothing.

¹²See Harvey E. Brazer, "Income Tax Treatment of the Family;" and Alicia Munnell, "The Couple vs. The Individual under the Federal Personal Income Tax;" both in *The Economics of Taxation*, ed. Henry J. Aaron and Michael J. Boskin, Washington, D.C., Brookings Institution, 1980.

¹³The notion of children as consumption can be traced to Henry Simons, *Personal Income Taxation*, Chicago: University of Chicago Press, 1938.

Similarly, the choice of a spouse could be seen as a consumption or investment choice, which should not alter the tax paid by the individual, or the combined tax of the two spouses. In this case, the individual should be the tax unit.

While the argument that children constitute consumption to their parents may be a defensible one, using this view as a guide to making tax policy is problematic. Even if the adults have made a choice, a troublesome aspect of this treatment of children as consumption is that it considers only the well-being of the parent or parents. Parents' tastes for children aside, the material level of consumption for children as well as for adults is affected by the number of others in the family.

Some theories have suggested that children could be seen as an investment, perhaps for support in old age. There is some justification for this theory of parental motivation, although it must surely be less than universal since many parents leave bequests to their children, rather than being supported by them in old age. If investment were the objective of having children, then there would be some justification for tax relief, since the cost of such an investment should, in theory, be recovered; at the same time, returns (such as help in old age) should be taxed to the parents. Our tax system is not designed along these lines, and, in any case, the children-as-investment theory also suffers from a lack of focus on the well-being of the children.

Ability to Pay Approaches. Another approach is simply that of ability to pay, which is the cornerstone of progressive taxation. Applying this ability-to-pay standard of taxation is straightforward in theory if one begins with the proposition that families with equal standards of living before tax should have equal standards of living after tax. If all family members were more or less identical in their needs and if all goods consumed were purely private in nature, this standard would suggest full income splitting of total family income among all members of the family. One could merely divide all family income evenly and then subject each share to an identical rate structure. In a progressive tax system, larger families would pay smaller taxes than smaller families with the same total income.

The difficulty with this straightforward prescription is the existence of "club" goods within the family. Some goods are more or less purely private goods, such as food. If one person consumes food, it is not available to anyone else. Other goods have elements of a club nature (with more than one person consuming the goods without interfering with another's consumption). Such club goods include housing and some furnishings, reading materials, and the family car. None of these goods are pure shared goods since tastes may not be identical and congestion may occur, but they do provide scale advantages in consumption within a family. These scale advantages in family consumption are recognized in construction of the poverty line, which varies with family size, yet does not increase in full proportion to it.

If we knew how to scale ability to pay by family size, design of the income tax would be theoretically straightforward. The method would be as follows. Choose a representative family (e.g., a family of two). Devise the tax rate schedule to achieve the desired degree of progression, setting the exempt level at the poverty level or whatever other level is desired. The solution to horizontal equity is then, simply, an averaging approach. For example, consider a larger family which needs 50% more income than the basic reference family. This means that a larger family that has \$75,000 of income should have the same average tax rate as a smaller (reference) family with \$50,000 of income. We simply apply the basic tax rate schedule to two thirds of the larger family's income, and multiply the resulting tax liability by 1.5. This approach will produce the same effective tax rate for the larger family as for the reference family. (The larger family, which has more income, will still pay more taxes, but the fraction paid will be the same as the smaller family). The two families will have the same (although smaller) standard of living after tax just as they had the same standard of living before tax.

When exempt levels of tax are set roughly at the poverty rate, as was the intent of the 1986 Tax Reform Act, families whose income falls within the first rate bracket (the current 15% tax bracket) tend to have equal effective tax rates, if the relative poverty measures across families are correct (ignoring the earned income tax credit). These effects will not hold, however, when higher income families are considered or when other provisions, such as the child credit and the earned income credit, are considered. Moreover, families with one earner are better off than families with two earners at the same income because of the expenses of working, including child care, and the benefits of home production of the non-working spouse. Thus credits for child care expenses or allowances for working spouses can move the system towards more equitable treatment, at least vis-a-vis one-earner couples.

Targeted Family Assistance. At the opposite end of the spectrum is the notion of targeted family assistance, especially for lower income families, and often targeted towards children. To accomplish this targeting, allowances for family size differentials (e.g., personal allowances) are often made refundable, they take the form of a credit rather than an exemption, and benefits are often phased out as incomes rise. Several of these features have made their way into current law (where both the child care credit and the child credit exist, where the EITC is refundable, and personal exemptions, child credits, and the EITC are phased out). At least some bills have proposed that the child care credit be made refundable.

This view of family allowances differs from the philosophy that personal exemptions, along with other exclusions, should be used to exempt a minimum subsistence amount from the income base, the philosophy underlying the 1986 revisions, and one which is more in line with the ability to pay standard. Similarly, a benefit for child care would be more appropriately made through a deduction, if child care was viewed as one of the costs of working under an ability-to-pay approach.

Proposals that are driven by this philosophy are simultaneously addressing differentiation across family types and a vertical distribution objective. This objective is not necessarily inconsistent with the ability-to-pay objective addressed previously, even though it often appears to be because of the mechanisms chosen, such as credits that are phased out. For a given family size, any degree of vertical equity can be obtained through either exemptions or credits or by arranging the tax rate schedule appropriately. But, the differentiation across families at the same income level (or ability-to-pay) can be achieved only by selecting the sizes of personal exemptions for different family members. An ability-to-pay approach would include differentiation of families of different sizes at either high or low

income levels. When a vanishing exemption or credit is chosen in the interest of vertical equity, the actual result is to allow no differentiation for family size at higher income levels.¹⁴

Finally, it is important to recognize that the income tax system exists side by side with a welfare system and many conclude that targeted family assistance might better be addressed through the welfare system.

Applying the Ability to Pay Approach to Current Law

The ability to pay approach seems the most consistent and, to many, appealing of the three approaches to dealing with tax differentiation based on family size. This method considers the welfare of all in society rather than focusing exclusively on adults or children. In the remainder of this study, this standard will be used as a framework for analyzing horizontal equity in the current system and the implications of various tax proposals. In defining families that have the same ability to pay, the U.S. poverty levels for different family sizes will be used. Under this standard, a single person requires about 75% of the income of a family of two; a family of six requires about twice the income of a family of two. Thus, for a married couple with no children with \$20,000 of income, an equivalent single person would need \$15,000 and a married couple with four children would need \$40,000.

Unfortunately, there are several difficulties and uncertainties which complicate the analysis of the tax system using this standard; these are discussed in the Appendix, which also reports the tax provisions used to construct these tables.

The first subsection examines the variation in tax rates by size of family using these standards. The following subsections address special issues in addressing horizontal equity through the ability to pay standard: imputed income of spouses who work in the home, the child care credit, and the marriage penalty or bonus.

Tax Rates by Family Type and Size

Table 1 reports the effective tax rates for low- and middle-income taxpayers at different levels of income, for family sizes of up to seven individuals, and for the three basic types of returns — single, joint, and head of household, without considering the child credit. The families in each column have the same estimated ability-to-pay. These numbers assume that dependents are children and that the families are eligible for the earned income tax credit, but the table does not include the per child credit which will not become fully available until 1999 (the credit is \$400 in 1998). Itemized deductions are assumed to be twenty% of income. These

¹⁴One argument along these lines is that progressive taxation could be justified by the need to maintain human resources at the bottom of the scale (which justifies some minimum exclusion) and curb the accumulation of power at the top. Since the accumulation of power is undiminished by family size, there should be little differentiation at the top of the scale. See Harold M. Groves, *Federal Tax Treatment of the Family*, Washington, D.C., The Brookings Institution, 1963.

are illustrative calculations that do not account for any other tax preferences and are designed to show how the basic structural, family-related features of the tax law affect burdens. Table 2 reports the same tax burdens with the assumption that all children are eligible for the per child credit of \$500. Table 3 reports these effective rates for high-income individuals (in this case excluding the child credit, which would not affect the results in any case except the one noted, because the credit is largely phased out for these taxpayers). These measures account for the earned-income credit, assuming all wage income, and allow itemized deductions (assumed at 20% of income), but exclude provisions which are not broadly applicable, such as child-care credits. They also assume that all income is earned and/or taxed at full rates, although there are a variety of favorable treatments (e.g. lower capital gains tax rates) that would affect these effective tax rates in practice.

These tables suggest that the pattern of tax burden by family size varies across the income scale, as it reflects the complications of the earned income tax credit, the child credit, and graduated rates, including phase-out effects. Moreover, the variation across families which have the same ability to pay is substantial. At low incomes, families with children, whether headed by a married couple or a single parent, are favored because of the earned income tax credit. These include joint returns with three or more members and all head of household returns (which by definition have children or other dependents). However, the families with two or more children tend to get larger benefits because they receive the larger credit for having two children: yet the largest families do not fare as well (receive smaller subsidies) because of caps and phase-outs of the EITC which do not differentiate by family size. As income levels rise, singles and larger families pay higher tax rates before considering the child credit; with the child credit, the larger families are favored. However, they begin to lose this favorable position because the higher incomes needed to keep them at the same ability to pay level tend to phase them out of the credits and also push them up into higher tax rates. This effect continues for a time as incomes rise, as seen in the data in table 3.

Income Level for Family of Two						
Type-Size	5,000	10,000	20,000	35,000	50,000	
Single - 1	-0.08	0.02	0.08	0.10	0.12	
Joint - 2	-0.07	0.00	0.06	0.10	0.10	
Joint - 3	-0.34	-0.18	0.05	0.09	0.10	
Joint - 4	-0.40	-0.20	0.06	0.09	0.11	
Joint - 5	-0.40	-0.13	0.07	0.09	0.12	
Joint - 6	-0.37	-0.10	0.06	0.09	0.13	
Joint - 7	-0.33	-0.07	0.06	0.09	0.13	
H/H - 2	-0.33	-0.21	0.03	0.10	0.11	
H/H - 3	-0.40	-0.30	0.02	0.09	0.12	
H/H - 4	-0.40	-0.20	0.07	0.09	0.13	
H/H - 5	-0.40	-0.14	0.06	0.09	0.13	
H/H - 6	-0.37	-0.10	0.06	0.10	0.14	
H/H - 7	-0.33	-0.08	0.06	0.10	0.14	

Table 1: Average Effective Income Tax Rates by Type of Return,Family Size, and Income: Low and Middle Income Taxpayers(1997 income levels), No Child Credit

Source: Congressional Research Service. Data based on relative poverty levels for 1997, U.S. Census Bureau (http://www.census.gov/hhes/poverty/pre97siz.html). The dollar amounts refer to the income for a family of two; larger families in each column would have more income and singles would have less income.

Income Level for Family of Two							
Type-Size	\$5000	\$10000	\$20000	\$35000	\$50000		
Single - 1	-0.08	0.02	0.08	0.10	0.12		
Joint - 2	-0.07	0.00	0.06	0.10	0.10		
Joint - 3	-0.34	-0.18	0.02	0.08	0.09		
Joint - 4	-0.40	-0.20	0.03	0.07	0.10		
Joint - 5	-0.40	-0.13	0.02	0.07	0.11		
Joint - 6	-0.37	-0.10	0.01	0.06	0.11		
Joint - 7	-0.33	-0.08	0.00	0.06	0.11		
H/H - 2	-0.33	-0.21	0.00	0.08	0.10		
H/H - 3	-0.40	-0.30	0.00	0.07	0.10		
H/H - 4	-0.40	-0.20	0.02	0.06	0.11		
H/H - 5	-0.40	-0.14	0.01	0.06	0.13		
H/H - 6	-0.37	-0.10	0.00	0.06	0.13		
H/H - 7	-0.33	-0.08	-0.01	0.06	0.14		

Table 2: Average Effective Income Tax Rates by Type of Return,Family Size, and Income: Low and Middle Income Taxpayers (1997income levels), with \$500 Child Credit

Source: Congressional Research Service. Data based on relative poverty levels for 1997, U.S. Census Bureau (http://www.census.gov/hhes/poverty/pre97siz.html). The dollar amounts refer to the income for a family of two; larger families in each column would have more income and singles would have less income.

Income Level for Family of Two							
Type-Size	\$75,000	\$100,000	\$200,000	\$1,000,000			
Single - 1	0.16	0.17	0.21	0.30			
Joint - 2	0.13	0.16	0.20	0.28			
Joint - 3	0.14*	0.16	0.22	0.28			
Joint - 4	0.15	0.17	0.24	0.31			
Joint - 5	0.16	0.18	0.25	0.31			
Joint - 6	0.16	0.19	0.26	0.32			
Joint - 7	0.17	0.20	0.27	0.32			
H/H - 2	0.18	0.17	0.22	0.28			
H/H - 3	0.15	0.17	0.23	0.29			
H/H - 4	0.16	0.18	0.25	0.31			
H/H - 5	0.17	0.19	0.26	0.31			
H/H - 6	0.17	0.20	0.26	0.32			
H/H - 7	0.17	0.21	0.27	0.32			

 Table 3: Average Effective Income Tax Rates by Type of Return,

 Family Size, and Income: High Income Taxpayers (1997 income levels)

* This rate would be 0.13 with the child credit.

Source: Congressional Research Service. Data based on relative poverty levels for 1997, U.S. Census Bureau (http://www.census.gov/hhes/poverty/pre97siz.html). The dollar amounts refer to the income for a family of two; larger families in each column would have more income and singles would have less income.

Overall, these calculations suggest (1) that singles are taxed more heavily than childless couples; (2) when the child credit and EITC are available, families with children tend to be favored over families without children at low and moderate income levels; (3) the number of children in a family sometimes causes more beneficial treatment and sometimes less depending on how the EITC and child credit are being phased out; and (4) the graduated rate structure causes large families at higher income levels to be taxed significantly more. These results can be characterized as resulting from the fundamental structural flaws of phase-out provisions and rate brackets. Phase-out points and rate brackets should be based on family size if the ability to pay criterion is being used to determine the tax structure. The flat amount of the child credit also causes it to have little effect on relative tax liabilities at high income levels; phasing it out causes more distortion across family size. Similarly, the phase-out of the personal exemption exaggerates the over-taxation of large families relative to small ones at higher income levels

At low income levels, however, the family comparisons are affected by the earned-income tax credit, and differences in tax burdens by family size can be striking. If there were no earned-income tax credit, effective tax rates would be relatively uniform at the lower income levels, at zero or a small positive percentage amount. The EITC introduces disparities. First, the EITC rate is much lower for single taxpayers or two-member joint returns where there are no qualifying children than it is for families with children. Second, if one accepts the ability-to-pay standard, the EITC has an inappropriate adjustment for family size. There is no reason to vary the rate of the EITC by family size; but the base (or maximum creditable wage) and the phase-out levels should be varied according to the ability-to-pay standard. That is, both dollar amounts—the amount on which the EITC applies and the income at which the phase-out begins—should be tied to family size according to the ability to pay standard, while the EITC rate should be the same for all families. By not varying these amounts, large families may be poor but still have enough income to receive little or no EITC.

To make the EITC neutral across families, using the ability-to-pay standard, would require, in addition to allowing it at a common rate for all families, changing the base levels and the phase-out levels for family size. Changing the rate, as was done in 1990 and retained when the EITC was expanded in 1993, does not accomplish equal treatment across families of different sizes, providing too much adjustment for some families and not enough for others.

One-Earner Married Couples and Imputed Income; Child Care Credits

The tax rates in tables 1-3 do not account for some important features of the income tax that have implications for horizontal equity. One such issue has to do with the treatment of married couples where only one individual works outside the home. These families are better off because the spouse not employed outside the home can perform services at home which result in cost savings, perform household tasks which increase leisure time for the rest of the family, or enjoy leisure. The value of this time, which is not counted in the measured transactions of the economy, is referred to as "imputed income." This imputed income is not taxed, and it would

probably be impractical to tax it. Nevertheless, the tax burden as a% of cash plus imputed income is lower for such a family.

Imputed income is not easily valued. Such individuals could, in most cases, work at least at the minimum wage. Table 4 shows the effective tax rates for one-earner families at low and moderate income levels, assuming an imputed value of the services of the non-working spouse at the minimum wage (\$5.15 per hour) for 40 hours per week and 48 weeks per year. (We do not include the lower income families who would have no cash income or very high income families who would be negligibly affected) Since families are arrayed by equivalent abilities to pay, this treatment is the same as allowing a \$9,888 deduction from income, which changing any of the other provisions (including the size of itemized deductions).

These adjustments illustrate the importance of non-taxation of imputed income of the non-working spouse, a benefit that can significantly reduce the effective tax rate, as can be seen by comparing the tax rates in table 4 with those in tables 2 and 3. For example, at an income level of \$35,000 for a family of two, effective tax rates across families range from 6 to 10% in table 2; incorporating the new tax rates in table 4, they range from 4 to 10%.

Income Level for Family of Two							
Size	\$20,000	\$35,000	\$50,000	\$75,000	\$100,000		
2	0.00	0.06	0.08	0.10	0.13		
3	-0.08	0.05	0.07	0.11	0.14		
4	-0.03	0.05	0.07	0.12	0.16		
5	-0.03	0.05	0.08	0.14	0.17		
6	-0.03	0.04	0.08	0.14	0.18		
7	-0.03	0.04	0.09	0.15	0.19		

Table 4: Average Effective Income Tax Rates for One Earner Married Couples, Imputed Income of Non-Working Spouse Valued at Minimum Wage, By Family size and Income (1990 income levels); Assumes Child Credit

Source: Congressional Research Service. The dollar amounts refer to the income for a family of two; larger families in each column would have more income. Incomes include imputations.

If the primary reason a spouse does not work is to care for children, the disparate treatment between these taxpayers as compared to taxpayers who work and also have children can be offset by the child-care credit. As shown in Table 5, the full use of the child-care credit can also lower effective tax rates. This benefit ameliorates the differential between these two classes of taxpayers with children; however, the credit does tend to increase the relative favoritism towards families with children in general in the low middle and middle income classes. (Very low income families do not

have enough tax liability to benefit from the credit, and the credit has little relative effect on higher income individuals). Essentially, these features indicate that single individuals and childless working couples pay the highest tax rates, based on the ability-to-pay standard, for all but the very highest income taxpayers.

Income Levels for a Family of Two						
Туре	\$20,000	\$35,000	\$50,000	\$75,000	\$100,000	
Joint- 3	0.00	0.07	0.08	0.13	0.16	
Joint- 4	0.00	0.05	0.09	0.14	0.17	
Joint- 5	0.00	0.05	0.10	0.15	0.18	
Joint- 6	0.01	0.04	0.10	0.15	0.19	
Joint- 7	0.02	0.04	0.10	0.16	0.20	
H/H - 2	-0.03	0.07	0.09	0.14	0.17	
H/H - 3	-0.07	0.05	0.08	0.14	0.26	
H/H - 4	-0.01	0.04	0.10	0.15	0.18	
H/H - 5	-0.02	0.05	0.12	0.16	0.19	
H/H - 6	-0.03	0.05	0.12	0.16	0.20	
H/H - 7	-0.04	0.05	0.12	0.17	0.21	

Table 5: Average Effective Income Tax Rates Assuming Full Use ofDependent Care Credit, By Family Size and Type, and By Income(1997 income levels), Assumes Child Credit

Source: Congressional Research Service. The dollar amounts refer to the income for a family of two; larger families in each column would have more income.

These calculations should be considered with caution, as they depend on the precision of the poverty scale ratios, which do not take into account the heterogeneity of the cost of rearing children, and are aimed at measuring cash needs to attain a given standard of living. Lower income families with younger children who need child care may find their standard of living in material matters lower than other types of families, because of the higher cost of that care relative to their income. In that case, the effective tax rates in tables 4 and 5 may be understated for these families and the child care credit may be considered an appropriate device to adjust for these particular circumstances. At higher income levels, child care costs are probably much smaller relative to income, even if more is spent on care. The child care credit, however, has little effect on effective tax rates at these income levels. Moreover, the potential wages of at-home spouses are probably higher when the working spouses' incomes are higher, so that tax rates may be overstated in table 4.

Marriage Penalties and Marriage Bonuses

Another equity issue has to do with the fact that individuals may live together as a family unit but may not be recognized as such because they are not legally married.¹⁵ That is, the ability-to-pay measures are based on costs of achieving a given standard of living by a household. Single individuals who live together in the same fashion as married couples have the same ability to pay. However, remaining single can alter their tax liability. Remaining single can cause tax liability either to rise or fall, depending on the split of income between the two spouses. If one individual earns most of the income, tax burdens will be higher for two individuals who are not married than for a married couple with the same total income, because the standard deductions are smaller and the rate brackets narrower. If income is evenly split between the two individuals, there can be a benefit from remaining single. Married individuals have to combine their income, and the rate brackets for joint returns, while wider than those for single individuals, are not twice as wide.

The marriage penalty or bonus might, in the context of the measures of household ability-to-pay, be described as a singles bonus or penalty. In any case, in considering the equity dimension to this issue (as opposed to an incentive effect), the tax rates of these families should be compared to the tax rates of other households.

Table 6 shows the effective tax rates for married couples and for unmarried couples with the same combined income, both where income is evenly split and where all income is received by one person. These income splits represent the extremes of the marriage penalty and the marriage bonus.

¹⁵For other discussions of this issue see Gregg Esenwein, *The Individual Income Tax and Marriage Neutrality*, Congressional Research Service, Library of Congress, Report No. 88-8 E, December 21, 1987; Daniel Feenberg, "The Tax Treatment of Married Couples and the 1981 Tax Law," In *Taxing the Family*, Ed. Rudolph G. Penner, Washington: American Enterprise Institute for Public Policy Research, 1983; Harvey Rosen, "The Marriage Tax is Down But Not Out," *National Tax Journal*, Vol. 40, December, 1987, pp 567-576; Daniel R. Feenberg and Harvey S. Rosen." Recent Developments in the Marriage Tax." *National Tax Journal*, Vol. 48, March 1995, pp. 91-101. Rosen, Harvey, "Is It Time to Abandon Joint Filing?" *National Tax Journal*, Vol. 30 (December 1977): 423-428. U.S. Congressional Budget Office. *For Better or for Worse: Marriage and the Federal Income Tax*. Washington , DC, June 1997.

Table 6: Average Effective Income Tax Rates for Joint Returns and
Unmarried Couples, By Size of Income and Degree of Split
(1997 levels of income)

Income Level for a Family of Two							
Туре	\$10,000	\$20,000	\$35,000	\$50,000	\$75,000	\$100,000	\$200,000
No Child	1						
Joint	0.00	0.06	0.10	0.10	0.13	0.16	0.20
Single 50/50 Split	-0.07	0.05	0.09	0.10	0.12	0.14	0.19
Single 100/0 Split	0.05	0.10	0.13	0.15	0.17	0.19	0.23
One Chi	ld						
Joint	-0.18	0.02	0.08	0.09	0.13	0.16	0.22
Single 50/50 Split	-0.19	0.02	0.06	0.06	0.12	0.14	0.19
Single 100/0 Split*	0.07	0.10	0.13	0.15	0.17	0.19	0.23

*Individual without the child is assumed to be the earner. If the individual with the child is the earner, the row would read -0.18, 0.03, 0.09, 0.12, 0.16, 0.18, 0.23.

Source: Congressional Research Service. Note that effective tax rate does not always rise across incomes due to rounding.

The first set of calculations shows the effects on individuals without children. At the lowest level, a \$10,000 income, there is a significant benefit with an even split, primarily because these individuals do not get phased out of the EITC. When only one person earns the income, the phase-out of the EITC is not affected, but the single taxpayer is penalized by the lower standard deduction of singles; as a result there is a marriage bonus (tax liability would fall with marriage). Through most of the middle incomes, there is virtually no marriage penalty as a percentage of income, but significant marriage bonuses. The marriage penalties are small because of the existing rate structures, which provide larger deductions and wider brackets for joint returns than the single brackets. If exempt amounts and bracket widths were half as large for singles as for joint returns, there would be no marriage penalty even with equal division of income. The standard deduction and points at which the rate brackets go from 15% to 28% and 31% are about 60% as large as those for joint returns; hence, marriage penalties are not very large as a percentage of income. Bonuses, however, are quite pronounced because the taxpayer can now move to a much more favorable joint return.

The second set of calculations shows the effects of marriage between singles, where one has a child. The individual with the child is assumed to be the non-earner in the case of the 100/0 split; if the earner was assumed to have the child, the bonus would be smaller because the single earner would be taxed at lower head-of-household rates. The assumption that children remain with the non-earner reflects the likelihood that children would remain with the non-working spouse, who is typically the mother, in the event of divorce, or would have had custody of the children if the couple were never married. According to the Census Bureau, 85% of children who live with one parent live with their mother.¹⁶

In general, if income is evenly split, individuals pay more tax when they are married, as the combining of income more than offsets the flatter rate graduation. This is the marriage penalty. When income is unevenly split, the former effect is less important and taxes tend to be higher when individuals remain single — this is a marriage "bonus." The bonuses are particularly large when only one spouse works, because a non-working single cannot take any advantage of standard deductions, personal exemptions, child credits, or the earned income tax credit.

At low incomes, the effects are strongly driven by the earned income tax credit. In the case of two singles without children, marrying can cause them to be phased out of the EITC, an effect most pronounced at the \$10,000 combined income level. The same effect occurs when one of the individuals has a child, but at higher levels because of the higher phase-out rates. There is also a potentially powerful marriage bonus with respect to the EITC in cases where one partner earns most of the income but does not have the child; marriage makes that partner eligible for the EITC. A recent study of low income families indicates that this latter effect, the bonus, is the most common effect of the EITC.¹⁷

These comparisons suggest that marriage bonuses are probably more significant than penalties. An extensive study of the marriage penalty by the Congressional Budget Office (CBO)¹⁸ supports this notion. Using a similar allocation of children as that in Table 6, in 1996, 39% of couples have penalties, 4% are unaffected, and 57% have bonuses. Penalties were estimated at \$25 billion and bonuses would be \$55 billion, with a net bonus of \$30 billion. Updated numbers for 1999 reflecting the child credit indicated that 37% had penalties (\$24 billion), 3% are unaffected, and 60 have bonuses (\$73 billion) for a net bonus of \$49 billion.

In most of its analysis, the CBO assumed children were allocated to minimize tax liability. This allocation is particularly important for bonuses because it would assign at least one child to the spouse with the higher earnings, who would then qualify for head-of-household status or the EITC. The importance of this choice of

¹⁶U.S. Census Bureau, Current Population Reports, Marital Status and Living Arrangements, March 1997.

¹⁷See Stacy Dickert-Conlin and Scott Houser. "Taxes and Transfers: A New Look at the Marriage Penalty." *National Tax Journal* 51, June 1998, pp. 175-217.

¹⁸U.S. Congressional Budget Office. *For Better or for Worse: Marriage and the Federal Income Tax.* Washington, DC, June 1997. These numbers were updated for 1999 in a memorandum from Bob Williams and David Weiner dated September 18, 1998.

allocation of children can be seen by comparing the effective tax rates reported in the footnote to table 7. When the child is assigned to the earner, that earner is eligible for head of household status, for the child credit, for the personal exemption of the child and for more generous EITC treatment that depends on number of children. At the \$10,000 equivalent level (about \$12,000 for a family of three), the bonus entirely disappears if the child is allocated to the spouse with earnings. This family has no positive tax liability after considering the child credit, and the earnings are eligible for the same EITC, which depends not on filing status but on the presence of children. If, however, the parent with earnings filed as a single, positive taxes are paid (because of loss of personal exemptions, part of the standard deduction, and a child credit) and the taxpayer loses the entire EITC because he is phased out of it). At the \$20,000 equivalent level, filing as a single rather than head of household causes loss of a small EITC, loss of the child credit, and of a personal exemption and part of the standard deduction. As the family moves through the income scale, the EITC becomes irrelevant; eventually it is the rate brackets that matter more (which are wider in the head-of-household schedule). Clearly, however, the child credit has made this allocation decision more important to measuring the marriage bonus.

CBO's estimate of aggregate penalties and bonuses confirms the importance of this allocation in measuring the aggregate size of bonuses. With the tax minimization assumption, in 1996 42% of joint returns had penalties and 51% had bonuses. Penalties amounted to \$28.8 billion and averaged about 2% of income, while bonuses amounted to \$32.9 billion and averaged about 2.3% of income. Most of the bonus (\$28.5 billion) went to the 44% of joint returns that had only one earner. Updated 1999 numbers including the child credit showed 43% had penalties of \$32 billion and 52% had penalties of \$43 billion, for a net bonus of \$10 billion.

The CBO study also examined the distribution of penalties and bonuses by income class. These numbers reflect CBO's assumption that children are assigned primarily to the higher earning spouse and do not reflect the recently enacted child credit. Lower income returns (adjusted gross income of less than \$20,000) were more likely to receive bonuses: 63% of the returns received bonuses, and 25% of returns were unaffected, with only 12% subject to penalties. Bonuses amounted to \$3.9 billion while penalties were only \$0.9 billion. However, for those returns with penalties, the penalties were larger relative to income (7.6%), than bonuses (5.0%), and the penalties and bonuses were much larger relative to income than for other groups. In the middle incomes (\$20,000 to \$50,000), bonuses were slightly more common but accounted for less in dollar terms than penalties. 55% of returns had bonuses and 44% penalties; these were respectively 2.6% and 3.2% of income. Penalties were \$9.6 billion and bonuses were \$8.7 billion. In the higher income categories (more than \$50,000), the opposite occurred: more returns had penalties (54% vs. 44% with bonuses; respectively 1.6% and 2%); penalties accounted for \$18.3 billion and bonuses for \$20.3 billion. It is difficult to know how these patterns would be affected by changing the allocation of children and including the child credit, although the dramatic increase in bonuses with an alternative allocation suggests that bonuses would dominate penalties across the income scale.

Note that, based on the ability-to-pay standard, the equity issue arises because individuals who live as a family unit without being married are receiving a benefit or a penalty, depending on their circumstances. That is, it might be clearer to refer

to a singles bonus rather than a marriage penalty, and a singles penalty rather than a marriage bonus. And, the implication for distributional equity in current law depends not on the size of bonuses or penalties for those already married, but for those who are not married, presumably a much smaller group. The Census bureau reported 109.2 million married adults living with their spouses (about 55 million households), but only 4.1 million unmarried couple households.¹⁹ In most cases, it would likely be the marriage penalty that these singles are avoiding, and, thus, some singles are enjoying lower taxes than are appropriate using the ability-to-pay standard.

Of course, singles could also have roommates and enjoy some of the benefits of club goods, although the less intimate relationship between roommates as compared to a couple that might marry might cause more congestion problems with club goods or make them less valuable. Unfortunately, these problems are not easily solved, since, in practice, it would be impossible, and intrusive into persons' lives, to adjust the tax law to take account of these relationships which do not involve legal arrangements.

Summary

The assessment of tax burdens in the framework of the ability-to-pay standard suggests that taxes across family groups have not been guided by any consistent philosophy. The ability-to-pay philosophy has been reflected in the choice of the family as the unit of taxation and the principle of exempting the poverty level income in the 1986 Tax Reform Act, which would result in an equitable system for families subject only to the 15% rate. This pattern is perhaps unavoidably violated when imputed income of one-earner families is taken into account, or when tax benefits (or penalties) by couples who live together but are not married are taken into account. But it is also greatly altered by a series of provisions aimed at children in the low and middle income levels that seem to reflect a family assistance motive (the child credit, the EITC, and the child care credit). At the high end of the distribution, taxes are reasonably even, although families with children are taxed more heavily, primarily because the rate brackets are not adjusted for family size. This effect is exacerbated by the phase-out of personal exemptions and child credit.

The result of these provisions is that the most heavily taxed families through most of the income distribution are single individuals and married working childless couples, while the most lightly taxed are one-earner married couples with children.

Efficiency Issues

Fairness or distributional issues are usually the focus of assessments of family tax issues, but there are also issues of economic efficiency. If the tax system encourages individuals to make choices which are not otherwise desirable, then their

¹⁹Census Bureau, Current Population Reports, Marital Status and Living Arrangements: March 1997.

welfare is worsened by comparison with a system where they receive the same income without the price distortion.

In discussing their proposal to allow a \$1000 child credit in 1991, Steuerle and Juffras stress the disincentives provided by the current combined welfare/tax system.²⁰ They note that low-income individuals may improve their lot by moving, working, and marrying. The welfare/tax system discourages all three. Many types of welfare benefits are not portable (an obvious example is subsidized housing, where often there are waiting lists). The phase-out of welfare benefits (including AFDC, food stamps, and medicaid) along with the additional costs of working (especially child care costs) can result in a family becoming worse off when working. Finally, marriage to a partner who earns income is discouraged since welfare benefits would be reduced or lost entirely; the combined income of the couple may fall as a result of marriage.

These disincentives have traditionally been an issue with the welfare system, although recent work requirements may have reduced that effect. But the income tax can also influence these decisions. Marriage penalties and bonuses can alter individual decisions to marry. And, while any tax system (other than a lump sum tax, which is not feasible) will distort work choices, the practice of combining couples' incomes on joint returns may have an especially important effect on labor supply of second earners, who are typically women. These workers' labor supplies are also affected by the social security system which provides significant survivor's benefits to spouses, so that second earners get very little in return for the payroll taxes they bear.

There has been a lot of anecdotal evidence about couples getting divorced to avoid the marriage tax penalty, although much of this evidence occurred before 1981, when the marriage penalty was much larger. Recently, a number of statistical studies have examined the evidence; they conclude that the marriage penalty or bonus has some effect on marriage but these effects are small.²¹ The Census data reporting only a relatively small number of unmarried couple households supports that notion. Of course, there are bonuses as well as penalties; in fact, the EITC does the opposite of a traditional welfare system for very low incomes, since a single individual with earnings can become eligible for a much larger credit by marrying an individual with low earnings and with children.²² However, even if the effects are small, it may be disturbing to have a tax system where social behavior that is considered by many as inappropriate (living together without marriage) is encouraged by the tax law. It is probably for this reason that marriage penalties have been of greater concern than bonuses, although bonuses are larger and more pervasive.

²⁰C. Eugene Steuerle and Jason Juffras, "A \$1000 Tax Credit for Every Child; A Base of Reform for the Nation's Tax, Welfare, and Health Systems," The Urban Institute, April 1991.

²¹See U.S. Congressional Budget Office, *For Better or for Worse: Marriage and the Federal Income Tax,* Washington, D.C., June 1997, pp. 12-14 for a survey of the literature.

²²See Stacy Dickert-Conlin and Scott Houser. "Taxes and Transfers: A New Look at the Marriage Penalty." *National Tax Journal*, Vol. 51, June 1998, pp. 175-217.

The effect of the tax system on second earners is of considerable interest because this is the main class of workers that at least some empirical evidence has suggested to be quite sensitive to wages (and net wages are affected by taxes). A fall in the net wage can have effects that both encourage and discourage labor supply. Because income has decreased, individuals may work harder to make up that income (the income effect). At the same time, the lower wage (and lower "price" of leisure) discourages work (the substitution effect). Both effects together govern the labor supply, but the latter effect determines the degree of distortion imposed by the tax system. Most empirical evidence suggests that work effort by primary workers is not much affected by wage rates either through income or substitution effects, especially with respect to their decision to participate in the labor force, but also with respect to hours worked. Married women are found to be more responsive in some studies, primarily with respect to participation decisions. Note, however, that there are a number of difficulties in statistically estimating participation decisions (for example, the wage of a person who is not working cannot be directly observed in a cross section study).²³

Married women tend to face the highest rates of tax for a given income group because, under joint filing, their income is added to that of their husbands and taxed at his marginal tax rate. A single individual will have a considerable amount of income exempt from tax through personal exemptions and standard deductions, and his or her income will then be taxed at the first rate bracket. If a husband is already working, the exemptions and deductions, and even most of the lower brackets may be used up.

To the extent that we have evidence of a sensitivity to wages in labor supply, it is among married women who are affected by potential marriage penalties and are most heavily taxed. This effect might be considered in formulating tax policy.

The child care credit can also affect the tax burden on married women who are considering working. One of the costs of working is child care, and tax relief can reduce that cost of child care. Since the current tax system excludes imputed income from those working at home, there is a tax increase associated with the decision to work that can be offset by the child credit. This effect is illustrated in the comparison of tables 4 and 5. Thus, an increase in the child care credit will reduce the increase in tax liability from working and presumably lead to more participation by married women.

Simplicity and Compliance

Fair and efficient treatment of families cannot be achieved if the tax system is too complicated. Simplicity may sometimes conflict with the objectives of equity and efficiency, since targeting benefits may require complex calculations. Questions

²³See the previous citation, pp. 10-12 for a discussion. See also Thomas A. Mroz, "The Sensitivity of an Empirical Model of Married Women's Hours of Work to Economic and Statistical Assumptions." *Econometrica*, Vol. 55 (1987), pp. 765-799.

of simplicity are especially important at the lower end of the income scale, where taxpayers have the most limited resources to deal with complexity.

Many strides have been made in simplifying the filing of tax returns. In particular, the increase in personal exemptions in 1986 eliminated many individuals from the tax filing population. Providing relief through refundable credits such as the EITC added many of these individuals back to the filing population. Moreover, compliance with the EITC has been questioned, as the EITC has been claimed by some ineligible individuals and has not been claimed by some eligible ones. The introduction of multiple rates depending on family circumstances had required the use of a tax table to figure the EITC. Since that tax table already exists, modifications to make the EITC more consistent with ability-to-pay principles would add little complication.

Two features of the tax law that may introduce inequities or distortions are, however, desirable for purposes of simplicity. One of these is the exclusion of imputed income of wives who work in the home, which would be quite complicated to include. In general, the tax system does not include imputations of income.

The second feature is joint filing. Joint filing not only reduces the number of returns filed, but also avoids complicated issues of how to allocate unearned income, deductions, and children, between the two individuals. Any proposal for allowing or mandating individual filing would complicate tax administration. Even where specific rules are provided to allocate income, deductions, and children, each couple would have to make more than one tax calculation.

Analysis of Proposed Changes

There are a variety of proposed revisions to the tax law that would affect the tax treatment of the family and that can be addressed in light of these issues of equity, efficiency and administrative simplicity. We consider, in turn, proposals that address the marriage penalty, and proposals that address the child care issue.

Proposals to Address the Marriage Penalty

If we set aside issues of the earned income tax credit, there are three major types of options for addressing the marriage penalty: individual filing for married couples (either voluntary or mandatory), providing an income exclusion for the second earner, or altering the joint rate schedule and exemptions to accomplish the equivalent of full income splitting. There are also a variety of approaches that would reduce marriage penalties that arise as a result of the EITC.

In general, the major impetus for the marriage penalty proposals is presumably to reduce the marriage penalty, rather than increase the marriage bonus. For each option, we first report some statistics from the CBO study about three features of each proposal: how much revenue is lost, how much of the change is targeted towards penalties rather than bonuses, and the distribution of the tax cut across income groups. The latter data is related to vertical equity considerations. Recall,

however, that the data from the CBO study do not account for the recently enacted child credit and uses an allocation of children that minimizes bonuses and maximizes penalties. Then, the option is discussed with regard to horizontal equity, efficiency and administrative simplicity and compliance. Some variations of certain proposals are then addressed.

Individual Filing. Marriage penalties and bonuses could be eliminated (with a revenue gain) by mandating that married couples file individual returns. Using the assumption of dividing children so as to minimize tax liability, slightly less than half of married couples have penalties, so more taxpayers would experience an increase in tax than a decrease. The revenue gain would be the size of the existing net of bonuses over penalties, or about \$4 billion. If children were allocated to the lower earning spouse, the revenue gain would be much larger, \$30 billion.

It is unlikely that mandatory individual filing, with its tax increases, would be chosen. Although revenues could be used to reduce single and head of household rates so as to provide no revenue change or even a revenue reduction, many married couples who benefit from bonuses would pay higher tax. An approach that would be more costly, but which would not raise any current taxes would be to allow individual filing as an option. CBO has estimated that such an optional system would cost \$29 billion: 64% of the benefit would go to couples with over \$50,000 incomes; 3% to go to those with incomes under \$20,000. If the option used rules to allocate children to the lower earning spouse, the cost would drop to \$25 billion. All of the revenue would go to couples with penalties, so that this option would be perfectly target efficient.

Optional filing does not perform well on horizontal equity grounds. Married couples, even those who worked, would pay different taxes depending on their income shares. Married working couples do not appear to be overtaxed relative to singles, or to heads-of household unless they are childless and this proposal would benefit couples with children proportionally more, assuming head-of-household filing status was allowed and children could be allocated to minimize taxes.

On efficiency grounds, this option performs well. Only couples with second earners would benefit from this revision and thus all of the tax cut would reduce the tax on labor income to the secondary worker. The proposal would eliminate all marriage penalties.

A problem with this approach is administration. We have already seen that the assignment of children to each partner can have a dramatic effect on tax liability. In addition, how are unearned income and deductions to be assigned? CBO calculations assume assignment in proportion to earnings, which seems a reasonable rule. However, unless unearned income and deductions are apportioned in a restricted way, they could be assigned in a way to minimize taxes. And, even with a set of formal rules, the number of calculations and number of tax returns filed would be greatly increased. Optional filing, for example, would in many cases require three separate tax calculations to determine whether to take the option (one for a joint return, and two for individual returns). Administrative difficulties, however, could be largely overcome by the use of a look-up credit table.

A variation of this approach would allow optional filing, but only as a single; it would lose about \$19 billion in tax revenues.²⁴ This change would be an improvement on horizontal equity grounds, since it would limit benefits to an already favored group, married couples with children. This option would not be attractive to low income individuals because single filing reduces the EITC (although it would also prevent wives with small earnings, but whose family income is not low, from claiming the large child-based EITCs). CBO also discusses allowing a credit, which would be the difference between joint and single status for earned income, using the standard deduction; this option would cost \$10 billion. This latter option would have no effect on penalties caused by the EITC, and like the previous proposal would reduce benefits to couples with children who are already favored by other provisions.

These variations on optional filing would also simplify administrative problems. It would be much easier to design a look-up table if head-of-household returns were not allowed, and even easier with a table that simply reflects the differences between joint and single filing using only the standard deduction and spouses' personal exemptions (i.e. treating every married couple as a childless couple).

Lower Taxes for Joint Returns. Widening the brackets and standard deduction to twice that of the single return would cost about \$25 billion, but much of the revenue would go to couples that already have bonuses. According to CBO's methods of allocating children, which tended to minimize bonuses and maximize penalties, 51% of the revenue loss would nevertheless go to couples with bonuses, 7% would go to couples with penalties and would be in excess of penalties, and 43% would offset but not eliminate penalties. These numbers would shift dramatically toward increasing bonuses with different assumptions about assignment of children. Compared to the previous option, more of the tax cut would go to individuals with over \$50,000 in income (87%), but 6% would go to those with incomes below \$20,000. CBO also reports that more than five-sixths of the reduction in penalties would go to families with earnings over \$50,000; most of the bonus increase would also go to these higher income taxpayers.

This option would also not perform well on ability-to-pay horizontal equity grounds. It maintains equity between married couples with different earnings, and is the only way to eliminate marriage penalties (ignoring the EITC) without differentiating among couples (by increasing bonuses). However, it would lower the overall tax rates of married individuals relative to singles, including one-earner couples and families with children who are already more favored through most of the income distribution.

The proposal does not perform as well as the previous one on efficiency grounds. Much of the revenue cost would not be targeted at couples with penalties (although penalties for most childless couples would be removed). This proposal would not be very effective in reducing the disincentive for second earners to enter the labor force. Since the benefit would accrue regardless of whether there were two earners in the families, there is no special targeting towards the income of the second

²⁴This option is reported in a briefing paper prepared by Al Davis; House Budget Committee Democratic Caucus, *The "Marriage Penalty" and Related Proposals*, April 23, 1998.

earner. The second earner would still face marginal tax rates determined by the tax bracket of the first earner, although these rates would be somewhat lower for some taxpayers because of the tax reduction. That is, while this approach might encourage work effort, it would have a much smaller incentive for each dollar of revenue loss than would optional filing, which would treat the second earner's income as a separate taxable entity, with a substantial portion of the income exempt. This approach would not affect low income taxpayers who do not generally pay positive taxes, and would not affect the receipt or phase-out of the EITC.

The plan is, however, the simplest of any of the proposals, since it would require no change in the way tax returns are filed.

A more modest option would be to make the standard deduction larger for joint returns as proposed in the current tax bill (H.R. 4579); this would cost about \$6 billion and affect the approximately one half of married couples who use the standard deduction.²⁵ This option would, in addition to being much less expensive, concentrate more benefits to lower and moderate income individuals. However, it, too, is not very targeted; about half the benefits would go to reduce penalties and half to bonuses. And it would still extend benefits to those who are currently the most favored.

Increasing Phase-out Rates and other Options for the EITC. Another set of revisions would focus on the low income families who received the EITC. One option discussed by CBO would be to allow receipt of the EITC on the basis of individual earnings. This approach, while eliminating any marriage penalty arising from the phase-out of the EITC, would be very costly (estimated at \$14 billion) and would also allow the EITC to relatively well-off families where the second earner had small earnings. That effect would not be very much in the spirit of the purpose of the EITC. (CBO estimates that one-third of the tax cut would go to families with incomes above \$50,000.) If that approach were modified to phase out credits based on family income, at double the current levels, the cost would fall to \$10 billion, and only 10% would go to families with incomes over \$50,000. Another approach would be to split incomes and then apply the current limits, a provision that would be less beneficial to couples with very different incomes; this option would cost about \$4 billion, with virtually all of it going to families with incomes under \$50,000. Less than one% of the revenue loss would go to individuals now receiving bonuses.

These EITC revisions would extend the EITC to families with incomes greatly above the current limits who are generally considered middle income, and would differentiate substantially between families headed by couples rather than singles, particularly when children are involved. This can be seen by examining table 2. For example, a single-headed family of 5 receives a 40% subsidy at their equivalent of a \$5,000 income for two (about \$9,000), a 14% subsidy at twice the income (in the \$10,000 column, reflecting an income of about \$18,000) and 0% tax at four times that income (in the \$20,000 column, with an income of \$36,000). These numbers are comparing a fixed family size across the row as income rises. However, a joint return would be allowed to split incomes and each file as a head of household with

half the income, with high subsidies of around 40% even when the single family is reduced to a 14% subsidy, and at a 14% subsidy when a single-headed family has no subsidy. To conform the change to the ability-to-pay horizontal equity standard, phase-outs should be based on the total number in the family, not the marital status, and the credit rates should be equated across families, a very different type of reform.

The EITC revisions would, however, increase work incentives for second earners by allowing these earnings to be eligible for the EITC subsidy. This effect would be the smallest for splitting the income and largest with allowing optional separate filing.

Any of these revisions would complicate an already complex provision. However, since the EITC credit is already looked up in a table, certain revisions (such as income splitting) would be easy to incorporate in the tables.

Second Earner Deduction. A final alternative would be to allow a second earner deduction. CBO considered a deduction similar to that in effect between 1982 and 1986: a second earner would take a ten% deduction of income, not to exceed \$3000. This provision would cost \$9 billion. Eighty% of this cost would go to reducing penalties, by CBO's calculation. 82% of the tax cut would go to families over \$50,000. Penalties among higher income couples would be reduced the most by this change since it would not affect the EITC and the amount of the deduction is small at lower incomes.

A second earner deduction is in some ways a middle road between more dramatic changes. It tends to violate horizontal equity, but not as much as in the case of more dramatic changes, and much less than in the case of lowering taxes on all joint returns. It is almost as efficient, per dollar, as optional filing. It is less costly and more targeted to reducing penalties than increasing the rate brackets and standard deduction, although some of the benefit goes to families with bonuses. All of the benefit goes to the second earner, so it's performance with respect to reducing labor supply distortions is like that of the optional filing alternative. It adds a little complexity, but not nearly as much as optional filing.

Of course, a second earner deduction could be designed differently from the one enacted in the 1980s and studied by CBO. For example, suppose one desired a second earner deduction more targeted to lower income families. One possibility would be to allow an increase in the standard deduction equal to the difference between twice the singles and the joint standard deduction, currently about \$1400. This approach would remove the marriage penalty for all couples without children whose income is taxed at a 15% rate (ignoring the EITC). It would not affect couples using itemized deductions where deductions were \$1400 in excess of the current standard deduction. It would not be likely to benefit couples with bonuses, because of its concentration at lower income levels and its disallowance to itemizers. It would reduce the penalty for couples with children without making a judgement about the distribution of children. It may be that the marriage penalty has a greater effect on couples without children in any case. If the deduction were also allowed to reduce adjusted gross income for purposes of the EITC phase out, it would slightly reduce EITC phase-outs. It might also be possible to add an additional deduction for second earners that is dependent on the number of children. Such a provision would be much less costly.

A second earner deduction involving a flat allowance would also increase the return to taking a job. Since it is not marginal it would not necessarily affect the number of hours, but it would increase the return to labor participation, which is generally thought to be more sensitive to net wages. One proposal that has been suggested is to allow a larger (\$5,000) flat addition to the standard deduction, up to the amount of the second earner's wages, that would also reduce the EITC phase-out as well; such a proposal would significantly alter work incentives at the lower and middle of the income scale.²⁶

The distributional effects across the income classes could be altered by changing the rate deduction and ceiling. The flat exemption discussed above would be like a 100% deduction with a \$1400 ceiling, rather than a 10% deduction with a \$3000 ceiling. There are an infinite combination of ceilings and rates that could be used to adjust these distributional effects.

Summary. The analysis of options indicates that each proposal has drawbacks as well as merits. Some of these drawbacks, such as the problems with horizontal equity, simply reflect the inevitable conflicts between objectives that simply cannot be resolved in a progressive tax system. Nevertheless, some options, including optional individual filing and variations on this approach, as well as second earner deductions and certain revisions in the EITC are more economically efficient, because they are targeted to penalties and to earnings of married women. These more efficient options are more complex in some cases (primarily optional single filing), but there are variations which could easily use a look-up credit table. The revenue cost and vertical distribution of the various proposals also differ, and might be important concerns. And, it is clear that the allocation of children is of enormous importance in both measuring the size of marriage penalties and bonuses and in designing certain tax revisions.

Child Care Credits

Child care credit proposals fall into three basic types: expanding the credit, making it refundable, and introducing an allowance for one-earner couples. Each of these is discussed separately.

Expanding the Credit. The current child care credit is allowed at a 30% rate, phased down to 20% with adjusted gross income above \$28,000. The President has proposed an expansion of the credit to 50% up to \$30,000, phased down to 20% for taxpayers with incomes of \$60,000 or more. Dollar limits on the amounts eligible for the credit would be retained. (The Administration also proposes to expand business credits). Table 7 shows the maximum effects of this proposal, which can be contrasted with tables 2 and 5. These credits increase the tax subsidies available

²⁶See Laura Wheaton, *Marriage Penalties and Low Income Families*, Urban Institute, forthcoming.

to families with many children; they do not affect the lowest income families or smaller families, or higher income families.

There may be a case for indexing the maximum dollar amounts and phase-out levels if the original child care credit were deemed appropriate under some equity or efficiency standard.

The analysis of horizontal equity in this study suggests that there is not very much justification under the ability-to-pay standard for additional benefits to families with children at moderately low income and middle income levels. (Very low incomes would not be eligible for the credit because they have insufficient tax liability). Under a family assistance approach, special benefits for these children may be desirable; however, they would be more targeted to low income families if they were refundable. Their interaction with the EITC, however, might be considered.

Refundable Credits. The desirability of refundable credits depends on how strongly the family assistance notion dominates tax considerations. Low income and moderate income families who do not pay positive taxes have no relief for child care costs; however, they also receive very generous earned income tax credits and their tax burdens are much lower, based on ability to pay standards, than families without children. To some extent, this evaluation depends on whether the poverty scales adequately take into account the costs of child care and whether other direct assistance programs are being considered or might be preferable. It is true that the EITC has caused these families to file tax returns, and the administrative disadvantages to requiring tax filing to obtain the credit are reduced.

Income Levels for a Family of Two							
Туре	\$20,000	\$35,000	\$50,000	\$75,000	\$100,000		
Joint- 3	-0.01	0.06	0.08	0.13	0.16		
Joint- 4	0.00	0.05	0.09	0.14	0.17		
Joint- 5	-0.03	0.05	0.10	0.15	0.18		
Joint- 6	-0.04	0.04	0.10	0.15	0.19		
Joint- 7	-0.04	0.04	0.10	0.16	0.20		
H/H - 2	-0.04	0.05	0.09	0.14	0.17		
H/H - 3	-0.05	0.02	0.08	0.14	0.26		
H/H - 4	-0.05	0.04	0.10	0.15	0.18		
H/H - 5	-0.06	0.05	0.12	0.16	0.19		
H/H - 6	-0.05	0.05	0.12	0.16	0.20		
H/H - 7	-0.06	0.05	0.12	0.17	0.21		

Table 7. Effective Tax Rates Assuming Full Use of Dependent CareCredit, By Family Size and Type, and By Income (1997 income levels):Administration's Proposal

Source: Congressional Research Service. The dollar amounts refer to the income for a family of two; larger families in each column would have more income.

Credits for At-Home Parents. The argument for extending child care benefits to stay-at-home parents is not consistent with the economic analysis already provided. These parents already receive the benefits of failure to tax the value of their services in the household, which is a more generous benefit in most cases than the child care credits (although perhaps somewhat less than the proposed larger credit rates in the case of lower income families). In effect, these taxpayers already receive a child care benefit, since in economic terms care of children at home is one of the components of household production. If a credit is to be allowed, the base could be included in income so that there is no double counting of a benefit, or the credit rate could be lowered in these cases.

Conclusion

One of the most striking pictures that emerges of the assessment of the tax treatment of the family is how tax rates, both under prior law, with the child credit, and with proposed changes, such as the dependent care credit indicate the erratic treatment as family size changes along different income levels. For example, the earned income tax credit becomes much larger with one child and slightly larger with two children. The child credit can become much larger at low income levels with three children because of the refundability feature. This feature becomes more important with the larger child care credits which tend to reduce tax liability substantially, as shown in table 8. However, large families get phased out of the EITC. The effective tax rates show the consequences of enacting tax revisions on a piecemeal basis without a fundamental philosophy of how to treat the family.

This lack of a consistent standard also complicates the consideration of the marriage penalty, since the cost and evaluation of proposals for change are very sensitive to the assignment of children. The picture which appears to emerge from this analysis is that children have become much more crucial in affecting tax liability through most of the income spectrum than is justified by ability to pay standards. This is a significant departure from the philosophy underlying the 1986 changes, of exempting poverty level incomes, and it arises from child credits and the importance of the EITC. Before these changes, one could have argued that large families were over-taxed through much of the income spectrum, but that is no longer true. It suggests caution in adopting further child associated tax credits if the ability to pay standard is to be considered.

At the same time, the phase-out of all provisions that differentiate families by presence of children, except for the head-of-household rate schedule, has caused large families to be overtaxed. These phase-out provisions also complicate the tax law and a reconsideration of those phase-outs might be considered as a part of any general family tax revision.

The options with respect to the marriage penalty are, as is the case in the past, beset with imperfections. Horizontal equity cannot be obtained, so that part of the issue with respect to the marriage penalty is how far it is desirable to go to relieve the penalty at the cost of penalizing singles who are already more heavily taxed than the ability-to-pay standard suggests is appropriate. Certain approaches are, however, more clearly targeted to families with penalties and more likely to reduce labor supply distortions. Given the uncertainty about families with children's bonuses and penalties and the likelihood that families with children are already favored and probably less sensitive to tax considerations in their marriage decisions, approaches that focus on reducing the penalties between single and joint returns may be more appropriate.

Appendix: Assessing Horizontal Equity With Ability-to-Pay Tax Rates

The objective of this analysis is to define families that have the same standard of living, and calculate tax rates.

The first difficulty is determining how much more income a larger family must have to have the same standard of living as a smaller family. This study uses the official U.S. Government poverty levels, which vary by family size. Other measures of poverty and of equivalence across families may differ somewhat from this official poverty measure.²⁷ Most of the alternatives make a larger adjustment for family size than do the official levels, which would mean that tax rates for large families that are compared to smaller families using the poverty standards would be increased (and subsidies reduced). That would occur because larger families would need larger incomes than those specified in the poverty measures to attain the same standard of living. Since tax rates rise as income rises, these tax rates for larger families would rise as well. Subsidies such as the EITC would fall for the same reason.

The second difficulty involves heterogeneity of family members. Children of different ages may require different expenditures to maintain a given "standard of living," and the latter is ill defined in any case for heterogeneous families. Although the current child credit is allowed only for children under 17, personal exemptions are allowed for older teenagers and young adults who are dependent on their families while obtaining further education. In practice, it is difficult to differentiate for the age of children.

The third difficulty is that the club versus private nature of goods may vary across the income scale. While poverty lines which presumably take into account the club nature of these goods have been calculated for families, higher-income families may choose a different mix of goods. Thus, a fixed averaging approach which applies at all income levels may not be a good way to differentiate. For example, it seems reasonable to expect that higher-income families might spend more of their budget on housing, a good with significant club aspects, and less on food, a private good. Thus, the relative adjustment factors for the poverty line might incorrectly adjust for equating standards of living at higher levels of family income. Table A-1 shows the data on the budget shares devoted to private goods from the Survey of Consumer Expenditures by family size and income. While families at higher income levels consume slightly more club goods, the differences are not very pronounced. These results suggest that a uniform measure could probably be used for all income levels, although the incomes required for large families at higher income levels may be slightly overstated, since these families use more club goods. If these families had smaller incomes, their tax rates would be lower.

²⁷Patricia Ruggles, *Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy*, Urban Institute Press, 1990, pp. 72-99, for a discussion of these alternative measures.

Income Level (Thousands of \$)	Family of 2	Family of 3	Family of 4
<5	24	27	
5-10	29	25	28
10-15	24	26	27
15-20	25	24	26
20-30	22	26	24
30-40	23	22	23
40-50	21	26	25
50-70	22	22	23
>70	19	22	22

Table A.1. Budget Shares of Private Goods,Consumer Expenditure Survey, 1993-1994

Source: CRS calculations based on the Consumer Expenditure Survey, U.S. Department of Labor (ftp://146.142/pib/special.requests/ce/standard). Private goods are assumed to be food, health care, clothing, alcohol, tobacco, entrance fees, public transportation, education and personal care. The residual "club goods" are housing and home furnishings, private transportation, other entertainment and reading materials.

The fourth complication is that some families headed by married couples may have income from only one spouse working outside the home, while in others both spouses work. If these two families have equal cash income, and are otherwise identical, from an economic perspective the family with only one worker is better off than the family with two workers, since the unemployed spouse is either producing goods for home consumption, performing services which allow a greater amount of leisure for the family, or consuming additional leisure. This observation only holds for otherwise identical families; a family with a spouse who is at home because of illness or disability, for example, may have less ability to pay than a similar twoearner family. Thus, this view is only appropriate as a general proposition. In general, one could correct for this effect by imputing income to account for the additional value of services produced in the home or the additional leisure enjoyed by the family. Alternatively, a fixed exemption could be allowed to second earners (and to singles and heads of household), which is not allowed to the married couple with one earner.

A final difficulty is that not all economic groupings are legal families. In practice, it is not possible for the tax law to recognize these groupings. Under current law, a couple who marries can pay more tax or less tax, depending on their relative earnings, than they would pay if they lived together without legal marriage. There is no perfect solution to this problem, but compromises can be reached via the different tax schedules for single, joint, and head of household.

The criterion for constructing the tables in the text is the poverty line. (These numbers are for non-elderly households; poverty levels are slightly different for families with elderly heads.) In 1997, an individual with income of \$8,350 had an ability to pay equivalent to a married couple with income of \$10,748. For families of three, four, five, six, or seven members (with all additional members children), the respective equivalent amounts are \$12,919, \$16,276, \$19,154, \$21,446, and \$24,021.²⁸ Thus, a family of six needs roughly twice the income of a family of two to attain the same standard of living. These income ratios are applied across different income levels. The adjustments are slightly different for heads of households because poverty lines allow some differentiation for the additional member being a child versus an adult; a married couple is a family of two adults, and a head-of-household family of two has an adult and a child. For head of household families of two to seven members, the income levels are \$11,063, \$12,931, \$16,333, \$18,861, \$21,047, and \$23,076. In the text tables, therefore, an income of \$20,000 refers to an income for a two person family; comparable families of one will have incomes of slightly over about \$15,000 while families of six will have incomes of about \$40,000.

The tables in the text are based in 1997 income levels and tax rules, except for the \$500 child credit. In 1997, the personal exemption was \$2,650 and the standard deduction was \$6,900 for joint returns, \$6,050 for head of household returns, and \$4150 for singles. Taxable income up to \$41,200 for joint returns, \$33,050 for head of household returns and \$24,500 for single returns was taxed at 15%. Taxable income above these amounts, but below \$99,600, \$85,350, and \$59,570, respectively was taxed at 31%. The 36% rate bracket was reached at \$151,750 for joint returns, \$138, 200 for heads of household and \$124,650 for single returns. The point at which the 39.6% rate applies is \$271,050 for all returns. Itemized deductions are phased out at 3% of income over \$121,200. Personal exemptions are phased out at 2% for each \$2500 over incomes of \$181,000 (joint returns), \$151,000 (head of household returns), and \$121,000 (single returns). The child credit is phased out at \$50 for each \$1000 over \$110,000 for joint returns and \$75,000 for other returns.

²⁸U.S. Department of Commerce, Bureau of the Census, Poverty Thresholds, 1997. See http://www.census.gov/hhes/poverty/pre97siz.html.

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